

## Final Review 5 '0910

- 1) A supermarket sells salads by the pound. Shelby bought 3.2 lbs. of potato salad for \$9.12. Find the price per pound for the potato salad.

- a) How much would .8 pounds of potato salad cost?
- b) If the potato salad cost \$7.28, how many pounds were purchased?

- 2) For each table below, give the rate of change, the recursive rule, and the equation.

X	Y
0	3
1	4
2	5

X	Y
1	2.6
2	3.8
3	5.0

X	Y
-2	1
0	5
3	11

X	Y
-4	5
12	-3
2	2

- 3) A house was worth \$215,000 when it is purchased, but the price has been decreasing by \$3,500 per year since then. Write an equation to model the price of the house  $x$  years after its purchase. Be sure to define your variables.
- 4) Find the slope of the line through the points (1, -8) and (3, -7).
- 5) Write the point-slope form of a line through the points (3, -5) and (-1, 1).
- 6) Write the following equation in y-intercept form:  $y = 7(x-5) + 3x$ .
- 7) Solve the inequality  $4x - 5y \geq 35$  for  $y$  and graph the solution with proper shading.
- 8) Solve the systems of equations by substitution:
- a)  $y = 3x + 2$   
 $y = 4x - 1$
- b)  $y = 3x - 5$   
 $y = 5x + 3$
- 9) April washes dogs for extra money. She finds that she can use the equation  $P = 13n - 125$  to calculate her profit. Give some possible real world meanings for the numbers -125 and 13 and the variable,  $n$ .